

LISTING OF CLAIMS

1. (currently amended) An apparatus for producing hydrophobic silica fine powder, ~~eonsisting~~ ~~essentially of comprising:~~

a means for pyrolyzing a silane compound to form silica fine powder,
a means for agglomerating the silica fine powder,
a first cyclone and a first filter for collecting the agglomerated silica fine powder,
a fluidization vessel having a hydrophobizing section or device for hydrophobizing the
collected silica fine power and a deacidifying section or device for removing halogen
gas which accompanies the silica from the hydrophobizing section, said
hydrophobizing section or device being divided from said deacidifying section or
device and communicating with said deacidifying section or device in a lower portion
of the fluidization vessel, and
a second cyclone and a second filter for collecting hydrophobic silica fine powder which flies
out of the fluidization vessel including both the hydrophobizing section or the device for
hydrophobizing and the deacidifying section or the device for removing halogen gas, and for
returning the collected hydrophobic silica to the deacidifying section or device, wherein the
second cyclone and second filter can each be held at a temperature of 100 to 500°C.

2. (currently amended) An apparatus for producing hydrophobic silica fine powder, ~~eonsisting~~ ~~essentially of comprising:~~

a combustion chamber for pyrolyzing a silane compound to form silica fine powder,
an agglomerator for agglomerating the silica fine powder,
a first cyclone and a first filter for collecting the agglomerated silica fine powder,
a fluidization vessel having a hydrophobizing section or device for hydrophobizing the
collected silica fine power and a deacidifying section or device for removing halogen gas
which accompanies the silica from the hydrophobizing section, said hydrophobizing section
or device being divided from said deacidifying section or device and communicating with
said deacidifying section or device in a lower portion of the fluidization vessel, and

a second cyclone and a second filter for collecting hydrophobic silica fine powder which flies out of the fluidization vessel including both the hydrophobizing section or the device for hydrophobizing and the deacidifying section or the device for removing halogen gas, and for returning the collected hydrophobic silica to the deacidifying section or the device for removing halogen gas, wherein the second cyclone and second filter can each be held at a temperature of 100 to 500°C.

3. (previously presented) The apparatus of claim 1, wherein the hydrophobizing section or device for hydrophobizing the collected silica fine power is capable of conducting hydrophobizing of the collected silica fine powder at a temperature of 400 to 600°C and a flow velocity of 1 to 6 cm/s.
4. (previously presented) The apparatus of claim 2, wherein the hydrophobizing section or device for hydrophobizing the collected silica fine power is capable of conducting hydrophobizing of the collected silica fine powder at a temperature of 400 to 600°C and a flow velocity of 1 to 6 cm/s.
5. (previously presented) The apparatus of claim 1, wherein the decidifying section or device for removing halogen gas which accompanies the silica from the hydrophobizing section is capable of conducting deacidification at a temperature of 400 to 500°C and a flow velocity of 1 to 6 cm/s.
6. (previously presented) The apparatus of claim 2, wherein the decidifying section or device for removing halogen gas which accompanies the silica from the hydrophobizing section is capable of conducting deacidification at a temperature of 400 to 500°C and a flow velocity of 1 to 6 cm/s.
7. (previously presented) The apparatus of claim 1, wherein the second cyclone and second filter can each be held at a temperature of 130 to 200°C.
8. (previously presented) The apparatus of claim 2, wherein the second cyclone and second filter can each be held at a temperature of 130 to 200°C.

9. (currently amended) An apparatus for producing hydrophobic silica fine powder, ~~consisting~~ essentially of comprising:

a combustion chamber for pyrolyzing a silane compound to form silica fine powder,
an agglomerator for agglomerating the silica fine powder,
a first cyclone and a first filter for collecting the agglomerated silica fine powder,
a fluidization vessel having a hydrophobizing section or device for hydrophobizing the
collected silica fine power and a deacidifying section or device for removing halogen gas
which accompanies the silica from the hydrophobizing section, said hydrophobizing section
or device being divided from said deacidifying section or device and communicating with
said deacidifying section or device in a lower portion of the fluidization vessel,
a second cyclone and a second filter for collecting hydrophobic silica fine powder which flies
out of the fluidization vessel including both the hydrophobizing section or the device for
hydrophobizing and the deacidifying section or the device for removing halogen gas, wherein
the second cyclone and second filter can each be held at a temperature of 100 to 500°C, and
a conduit network extending between (1) the second cyclone and the second filter and
(2) the deacidifying section or the device for removing halogen gas, the conduit
network providing a flow path for returning hydrophobic silica collected by the
second cyclone and/or the second filter to the deacidifying section or the device for
removing halogen gas.

10. (previously presented) The apparatus of claim 9, wherein the hydrophobizing section or
device for hydrophobizing the collected silica fine power is capable of conducting
hydrophobizing of the collected silica fine powder at a temperature of 400 to 600°C and a flow
velocity of 1 to 6 cm/s.

11. (previously presented) The apparatus of claim 2, wherein the decidifying section or device
for removing halogen gas which accompanies the silica from the hydrophobizing section is
capable of conducting deacidification at a temperature of 400 to 500°C and a flow velocity of
1 to 6 cm/s.

12. (previously presented) The apparatus of claim 2, wherein the second cyclone and second filter can each be held at a temperature of 130 to 200°C.